

Title (en)

NAVIGATION SYSTEM FOR AUTOMATIC GUIDED VEHICLE

Title (de)

NAVIGATIONSSYSTEM FÜR AUTOMATISCH GEFÜHRTE FAHRZEUGE

Title (fr)

SYSTEME DE NAVIGATION DESTINE A UN VEHICULE A GUIDAGE AUTOMATIQUE

Publication

EP 0956523 B1 20011219 (EN)

Application

EP 98906250 A 19980206

Priority

- US 9802466 W 19980206
- US 79526797 A 19970210

Abstract (en)

[origin: WO9835276A1] A method and system for navigating automatic guided vehicles (AGVs) through a workplace having intelligible areas provides multi-vehicle traffic control. A guidance apparatus conveys a plurality of guidance signals, and a plurality of radio frequency tags (RF tags) are provided along the path over which the vehicle travels. Each RF tag is capable of conveying at least one of a plurality of unique radio frequency signals in response to electromagnetic excitation fields. A controller mounts on the vehicles, and includes an AGV computer, a sensor, a radio frequency identification (RFID) reader, and an RF modem for broadcasting messages to other vehicles to facilitate multi-vehicle traffic control. RF tags positioned for identifying characteristic area conditions related to the path of the vehicle reduce the need for custom modifications to guidance software on the host or AGV computers when operating in new environments, e.g., a new factory floor layout. The controller is responsive to at least one of the plurality of guidance signals received by the sensor and at least one characteristic area condition identified by the RF tag reader coupled to the AGV computer for initiating a predetermined action for navigating the vehicle through the area.

IPC 1-7

G05D 1/03

IPC 8 full level

G05D 1/02 (2006.01)

CPC (source: EP US)

G05D 1/0261 (2024.01 - EP US)

Cited by

CN108303983A; EP4184461A1; EP2284636A2; US9658622B2; US9811088B2; US9818003B2; US10146229B2; US10515237B2; US11288463B2; US11726496B2; US11797785B2

Designated contracting state (EPC)

BE DE FR GB

DOCDB simple family (publication)

WO 9835276 A1 19980813; AU 6152198 A 19980826; DE 69803038 D1 20020131; DE 69803038 T2 20020718; EP 0956523 A1 19991117; EP 0956523 B1 20011219; US 6049745 A 20000411

DOCDB simple family (application)

US 9802466 W 19980206; AU 6152198 A 19980206; DE 69803038 T 19980206; EP 98906250 A 19980206; US 79526797 A 19970210